ABSTRACT OF THE DISCLOSURE

The open and closed metal receiving vessel ~~1a, 1b, 1c, 1d~~ serving to hold hot and to melt metals and to transport said liquid metals comprises an open and closed cavity ~~11~~ which is subtended by thermally insulating materials ~~3, 3a, 3b, 3c, 3c, 3f~~ and which is ~~seamlessly~~ lined by an integral, exchangeable, single-layer or stratified textile, 3D-surface structure ~~4~~. ~~Said~~ The metal receiving vessel receives ~~the~~ liquid and solid metal to hold it hot or to melt it and also serves to transport ~~the~~ liquid metals. The heating to hold hot and to melt the metals is implemented by heater elements ~~6, 7~~ situated in the liquid metal and furthermore by heater elements ~~8~~ configured underneath the 3D-surface structure, or by induction. ~~(9, 10).~~ The closed metal receiving vessel ~~1b~~ is equipped with an integral, displaceable furnace riser pipe ~~20~~ on the furnace cover ~~16~~. When casting, the open metal receiving vessel ~~1a, 1e~~ may serve as a hot-holding, ladling and melting furnace and the closed metal receiving vessel ~~1b, 1d~~ may serve as a transport receptacle, all described operational criteria being met by exchanging the furnace cover or removing it and using the open and closed metal receiving vessel ~~1a, 1b, 1d~~.